The Soldier as a System
Future Force Warrior

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Factors That Shaped the Soldier System Concept

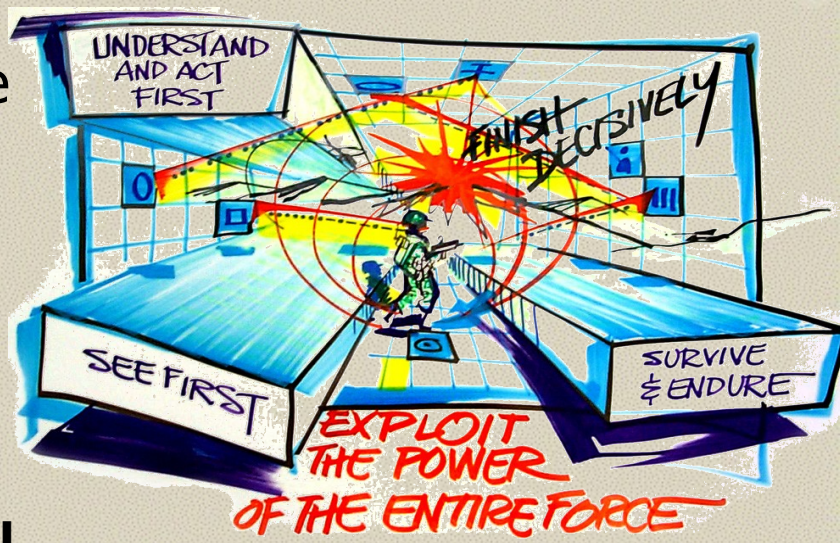
- **1984, 1991, 2001 – Soldier Related Army Science Boards**
- **1990 – Soldier Integrated Protective Ensemble (SIPE)**
- **1993 – 21st Century Land Warrior.**
- **1994 – Soldier System Command Established**
- **2000 – SAALT Independent Review Team**
- **2001 – Objective Force Warrior established;**

  NSC central management
- **2001 – TRADOC Approved Soldier as a System Concept**
- **2002 – Program Executive Office Soldier established**

Consistent Central Management Recommendation

VISION - Essential Principles

- "Overmatch" for the Soldier
  - **Dominate with Information**
- Exploit the Power of the Entire Force
  - **Collaborative massed effects**
- Three-dimensional Aspect of Effects
  - **Vertical integration**
  - **Stand-off**
  - **Expanded Area Under Control**



- Warrior Culture
  - **Human performance - centric design**
  - **Extended cohesion**
  - **Paradigm shifts in recruiting, manning, and training**
- Open Architecture
  - **Integrate emerging capabilities continuously**

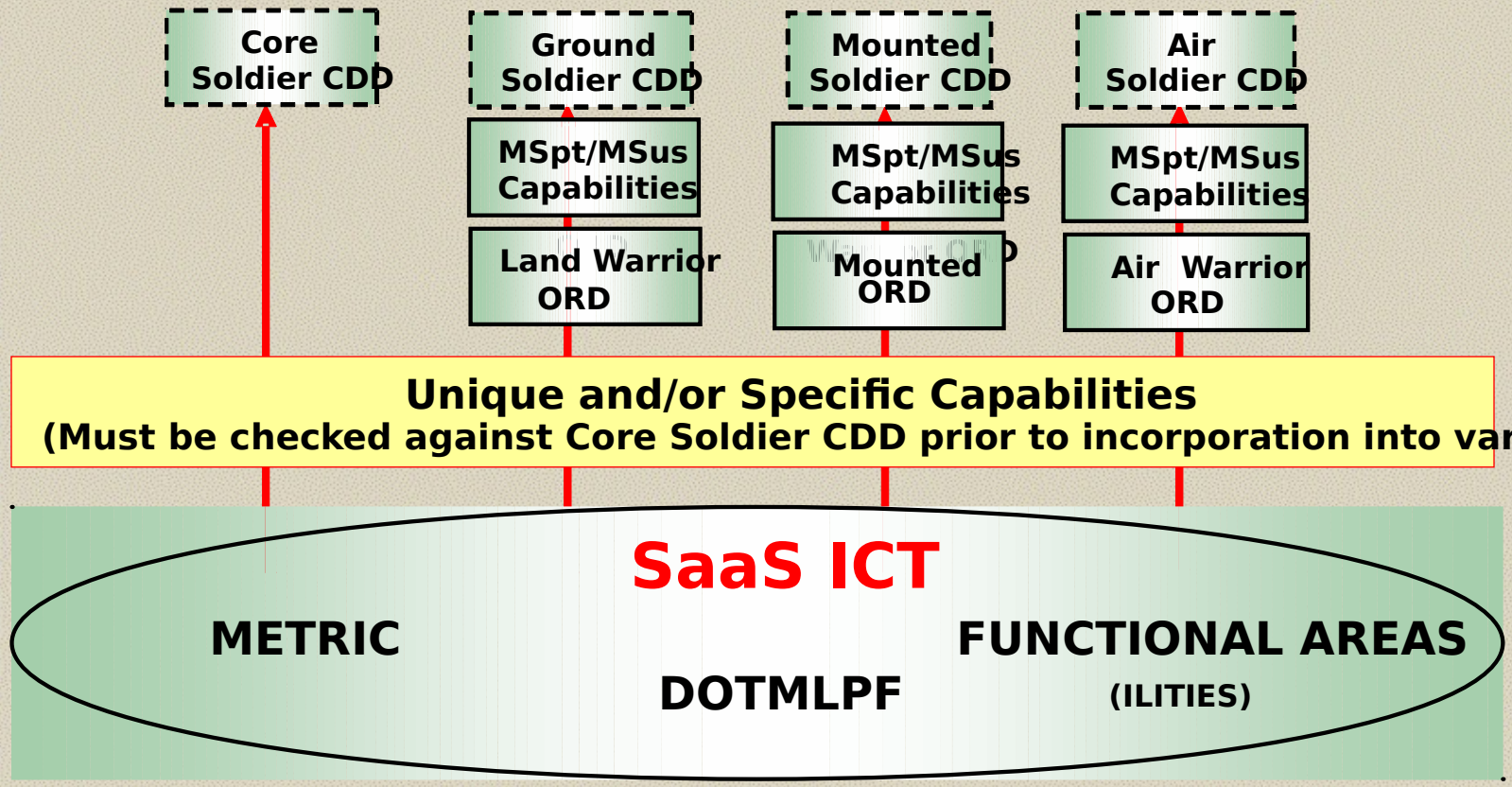
The Soldier System Concept and Chronic Challenges

<u>Concept</u>: A system of systems maximizing effectiveness of team of teams operations; a balanced integration of modular components structured to leverage cutting edge technologies

<u>Chronic Challenges</u>:

- **Weight**
- **Power**
- **Maximized Performance (Fightability)**
- **Affordability**

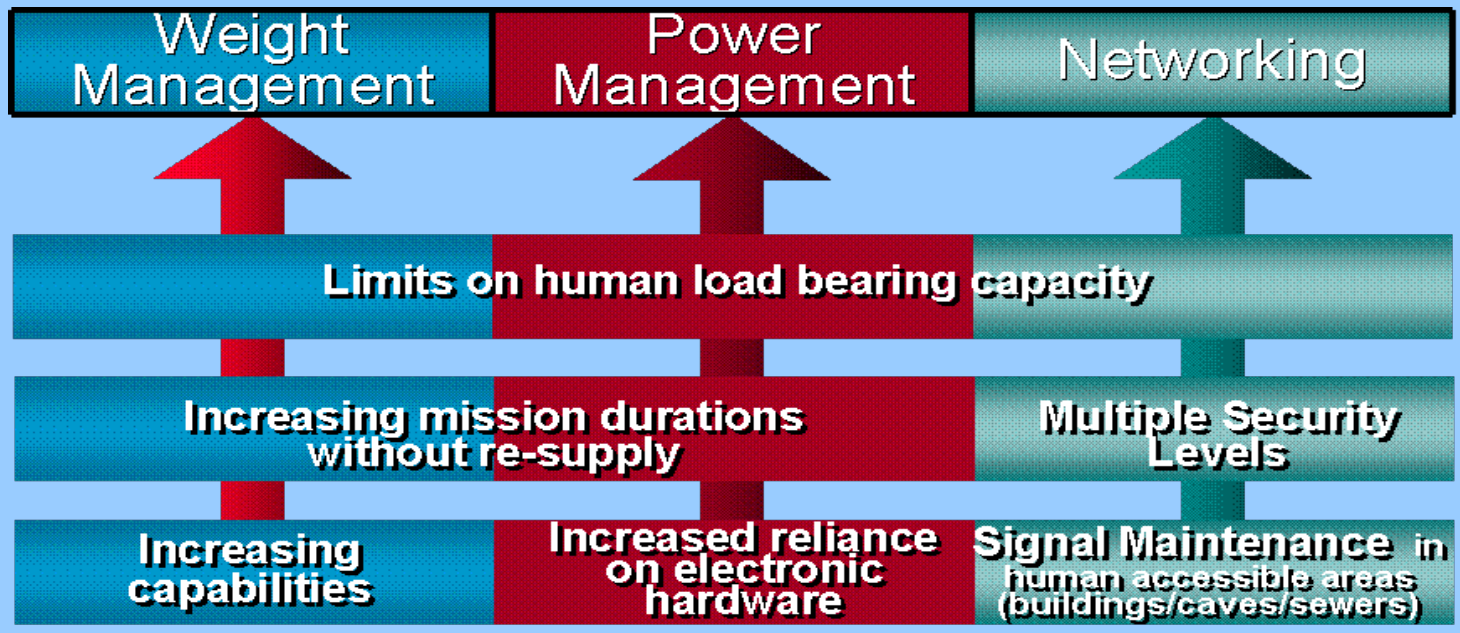
Soldier as a System Capability Development Strategy



Managing the Trade Space for Optimization

Efficient and highly effective individual Soldier and Team warfighting capabilities integrated into a modular, lightweight, low power package

Soldier Performance Requirements from CDDs

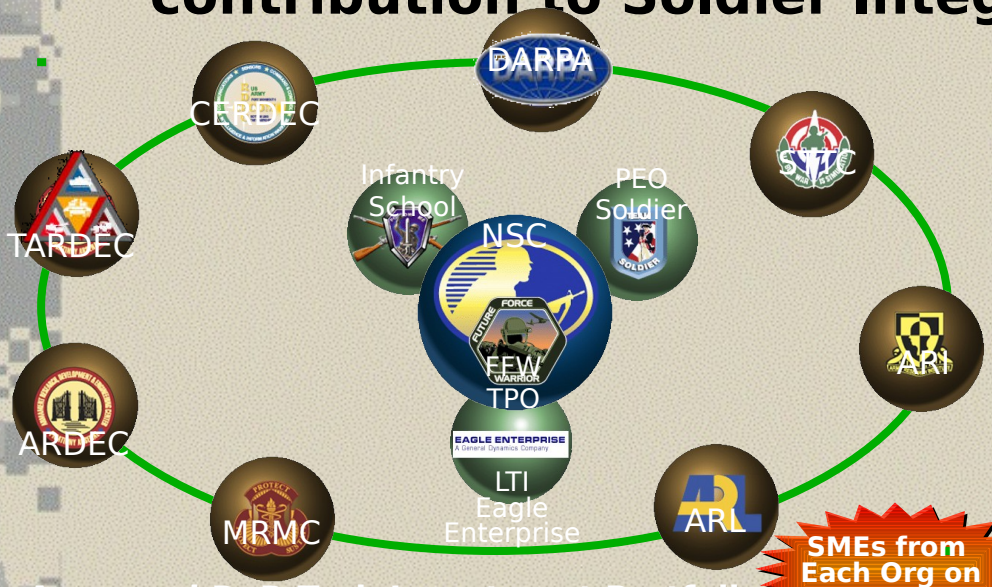


NSC: RDECOM's Soldier Science & Technology Integrator

- **NSC leads the Future Force Warrior Advanced Technology Demonstration (FFW ATD)**
  - **Army's Flagship S&T effort for Soldier as a System**
  - **Focus on individual Soldier and Sm[illegible] Combat Unit (SCU)**
  - **Leverage and integrate ongoing Army and DOD S&T**
  - **Architecture and system design supports FCS interoperability**
  - **Strong coordination with PEO Soldier for transition to the Land Warrior Program**

Leading Soldier Technology Integration Across the Army

- **Work collaboratively to leverage Soldier technologies**
- **Technology Maturation/Transition Agreements for supporting technology programs**
- **Leverage other Army/DoD programs to maximize contribution to Soldier Integration**



Army and DoD Tech Investment Portfolio

SMEs from Each Org on EFW Program Team

Maximizing VALUE to Soldiers through collaborative technology development

Future Force Warrior : The Army's Flagship Soldier S&T Program

- A partnership effort premised on Novel Teaming, Technology Development & Integration
  - Program team consists of SMEs from each organization
  - A "consolidated" program with Land Warrior Systems Design and Development Phase
    - NSC Technology Program Manager and PEO Soldier Deputy
  - Spiral Development matched with Future Combat System Spirals
  - Modular Integrated System

A revolutionary capability for the future force